Listing of Claims:

Claim 1 (Currently amended): A method for making a multi-pass heat exchanger core comprising the steps of:

providing at least one coolant plenum for containing flowing coolant;

installing adjacent to the at least one coolant plenum as least one first-pass plenum for containing a flowing heated ~~fluid~~ gas and defining a first area-in-flow of the heated ~~fluid~~ gas; ~~and~~

disposing adjacent to the at least one coolant plenum at least one subsequent-pass plenum for containing the heated ~~fluid~~ gas and defining a second area-in-flow of the heated ~~fluid~~ gas; and

arranging the plenums so that the contained heated ~~fluid~~ gas flows past a coolant plenum at least twice;

wherein the step of defining a first area-in-flow comprises defining a ratio of the first area-in-flow to ~~which substantially exceeds~~ the second area-in-flow to be between about 1.3 to 1 and about 1.7 to 1.

Claim 2 (Currently amended) The method of claim 1 wherein:

the step of providing at least one coolant plenum comprises providing a plurality of coolant plenums;

the step of installing at least one first-pass plenum comprises installing a plurality

of first-pass plenums, the plurality of first-pass plenums defining a first plurality of exhaust passages to direct exhaust gas flow through the first-pass plenums;

the step of disposing at least one subsequent-pass plenum comprises disposing a plurality of subsequent-pass plenums, the plurality of subsequent-pass plenums defining a second plurality of exhaust passages to direct exhaust gas flow through the subsequent-pass plenums;

wherein the first plurality of exhaust passages substantially exceed in number the second plurality of exhaust passages;

and

further comprising the step of arranging the first-pass plenums and the subsequent-pass plenums in an alternate manner between cooling plenums, every second plenum being a cooling plenum.

Claim 3: (Currently amended) The method of claim 1 comprising the steps of:

~~defining a first plurality of exhaust passages in each of the first pass plenums to direct exhaust gases through the first-pass plenums; and~~

~~defining a second plurality of exhaust passages in each of the subsequent pass plenums to direct exhaust gases through the subsequent pass plenums;~~

~~Wherein the exhaust passages in each first-pass plenum substantially exceed in number the exhaust passages in each subsequent pass plenum~~

disposing all the plenums substantially parallel; and

separating the first-pass plenums from the subsequent-pass plenums with at least one elongate divider substantially perpendicular to the plenums.

Claim 4 (Currently amended): A method for making a multi-pass folded-flow exhaust gas recirculation cooler comprising the steps of:

providing a plurality of coolant plenums for containing flowing coolant;

disposing adjacent to at least one of the coolant plenums a plurality of first-pass plenums, defining a first-area-in-flow, for containing hot exhaust gases;

disposing adjacent to at least one of the coolant plenums a plurality of subsequent-pass plenums, defining a second area-in-flow for containing the hot exhaust gases;

~~defining a plurality of exhaust passages in each of the first-pass plenums; and~~

~~defining a plurality of exhaust gas passages in each of the subsequent-pass plenums,~~

wherein the ~~exhaust gas passages have substantially equal radial cross-sectional areas, and the~~ total number ~~of exhaust passages in the plurality~~ of first-pass plenums substantially exceeds the total number ~~of exhaust passages in the plurality~~ of subsequent-pass plenums, whereby a ratio of the first area-in-flow to the second area-in-flow is between about 1.3 to 1 and about 1.7 to 1.

Claim 5: (Currently amended) The method of claim 4 comprising the further steps of:

~~disposing all the plenums substantially parallel; and~~

~~separating the first-pass plenums from the subsequent-pass plenums with at least one elongate divider substantially perpendicular to the plenums~~

defining a plurality of exhaust passages in each of the first-pass plenums; and

defining a plurality of exhaust gas passages in each of the subsequent-pass plenums.

Claim 6: CANCELLED

Claim 7 (New): A method for making a multi-pass cross-flow heat exchanger core comprising the steps of:

providing a plurality of coolant plenums for containing flowing coolant;

installing adjacent to at the coolant plenums a plurality of first-pass plenums for containing a flowing heated fluid and defining a first area-in-flow of the heated fluid; and

disposing adjacent to the coolant plenum a plurality of subsequent-pass plenums for containing the heated fluid and defining a second area-in-flow of the heated fluid;

disposing all the plenums substantially parallel;

separating the first-pass plenums from the subsequent-pass plenums with at least one elongate divider substantially perpendicular to the plenums; and

arranging the plenums so that the contained heated fluid flows past a coolant plenum at least twice;

wherein the step of defining a first area-in-flow comprises defining a ratio of the first area-in-flow to a subsequent area-in-flow to be between about 1.3 to 1 and about 1.7 to 1.

Claim 8 (New) The method of claim 7 wherein the number of first-pass plenums equals the number of subsequent pass plenums, and further wherein the step of defining a ratio of the first area-in-flow to a subsequent area-in-flow comprises providing the subsequent-pass plenums with a selected smaller effective dimension.